



6K8, 6K8-G, 6K8-GT

TRIODE-HEXODE CONVERTER

6K8
6K8-G
6K8-GT

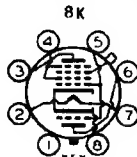
Heater	Coated Unipotential Cathode		
Voltage	6.3	a-c or d-c volts	
Current	0.3	amp.	
Direct Interelectrode Capacitances:			
	6K8 ⁰	6K8-G [▲]	6K8-GT [▲]
Hexode Grid #3 to Hexode Plate	0.03	0.08	0.08 <u>max.</u> μ uf
Hexode Grid #3 to Triode Plate	0.02	0.05	0.05 <u>max.</u> μ uf
Hexode Grid #3 to Triode Grid & Hexode Grid #1	0.2	0.2	0.2 <u>max.</u> μ uf
Triode Grid & Hexode Grid #1 to Triode Plate	1.1	1.8	1.8 μ uf
Triode Grid & Hexode Grid #1 to Hexode Plate	0.1	0.15	0.15 <u>max.</u> μ uf
Hexode Grid #3 to All Other Electrodes (R-F Input)	6.6	4.6	4.6 μ uf
Triode Plate to All Other Electrodes Except Triode Grid & Hexode Grid #1 (Osc. Output)	3.2	3.4	3.4 μ uf
Triode Grid & Hexode Grid #1 to All Other Electrodes Except Triode Plate (Osc. Input)	6.0	6.5	6.5 μ uf
Hexode Plate to All Other Electrodes (Mixer Output)	3.5	4.8	4.8 μ uf
Overall Length	{ 3-1/8" max. 2-9/16" max. 1-5/16"	{ 4-7/32" to 4-15/32" 3-21/32" to 3-29/32" 1-9/16"	{ 3-9/16" max. 3" max. 1-5/16"
Seated Height			
Maximum Diameter			
Bulb	Metal Shell, MT-8		
Cap	Miniature		
Base	{ Small Wafer Octal 8-Pin	{ Sm. Shell Oct. 8-Pin	{ Skirted Min. Sm. Wafer Oct. 8-Pin, Sleeve
Basing Designation	8K		
Pin 1 { 6K8, Shell 6K8-G, No Con. 6K8-GT, Sleeve	Pin 5 - Hexode Grid #1 & Triode Grid		
Pin 2 - Heater	Pin 6 - Triode Plate		
Pin 3 - Hexode Plate	Pin 7 - Heater		
Pin 4 - Hexode Grids #2 & #4	Pin 8 - Cathode		
Mounting Position	Cap - Hexode Grid #3 Any		

8K

1 2 3 4 5 6 7 8

KEY

BOTTOM
VIEW



BOTTOM VIEW

CONVERTER SERVICE

Hexode Plate Voltage	300 max. volts
Hexode Screen (Grids #2 & #4) Voltage	150 max. volts
Hexode Screen Supply Voltage	300 max. volts
Hexode Control-Grid (Grid #3) Voltage	0 min. volts
Triode Plate Voltage	125 max. volts
Hexode Plate Dissipation	0.75 max. watt
Hexode Screen Dissipation	0.7 max. watt
Triode Plate Dissipation	0.75 max. watt
Total Cathode Current	16 max. ma.
Typical Operation:	
Hexode Plate Voltage	100 volts
Hexode Screen Voltage	100 volts
Hexode Control-Grid Voltage	-3 volts
Triode Plate Voltage	100 volts
Triode Grid Resistor	50000 ohms
Hexode Plate Resistance (approx.)	0.4 megohm
Conversion Transconductance	325 μ mhos
Conversion Transcond. with Hexode Grid #3 Bias of -30 volts (approx.)	2 μ mhos
Hexode Plate Current	2.3 ma.
Hexode Screen Current	6.2 ma.
Triode Plate Current	3.8 ma.
Triode Grid & Hexode Grid #1 Current	0.15 ma.
Total Cathode Current	12.5 ma.

NOTE: The transconductance of the triode section, not oscillating, is approximately 3000 μ mhos when the triode plate volts=100 and the triode grid volts = 0.

□ In circuits where the cathode is not directly connected to the heater, the potential difference between heater and cathode should be kept as low as possible.

▲ With close-fitting shield connected to cathode.

○ With shell connected to cathode.

← Indicates a change.

May 1, 1941

RCA RADOTRON DIVISION
RCA MANUFACTURING COMPANY, INC.

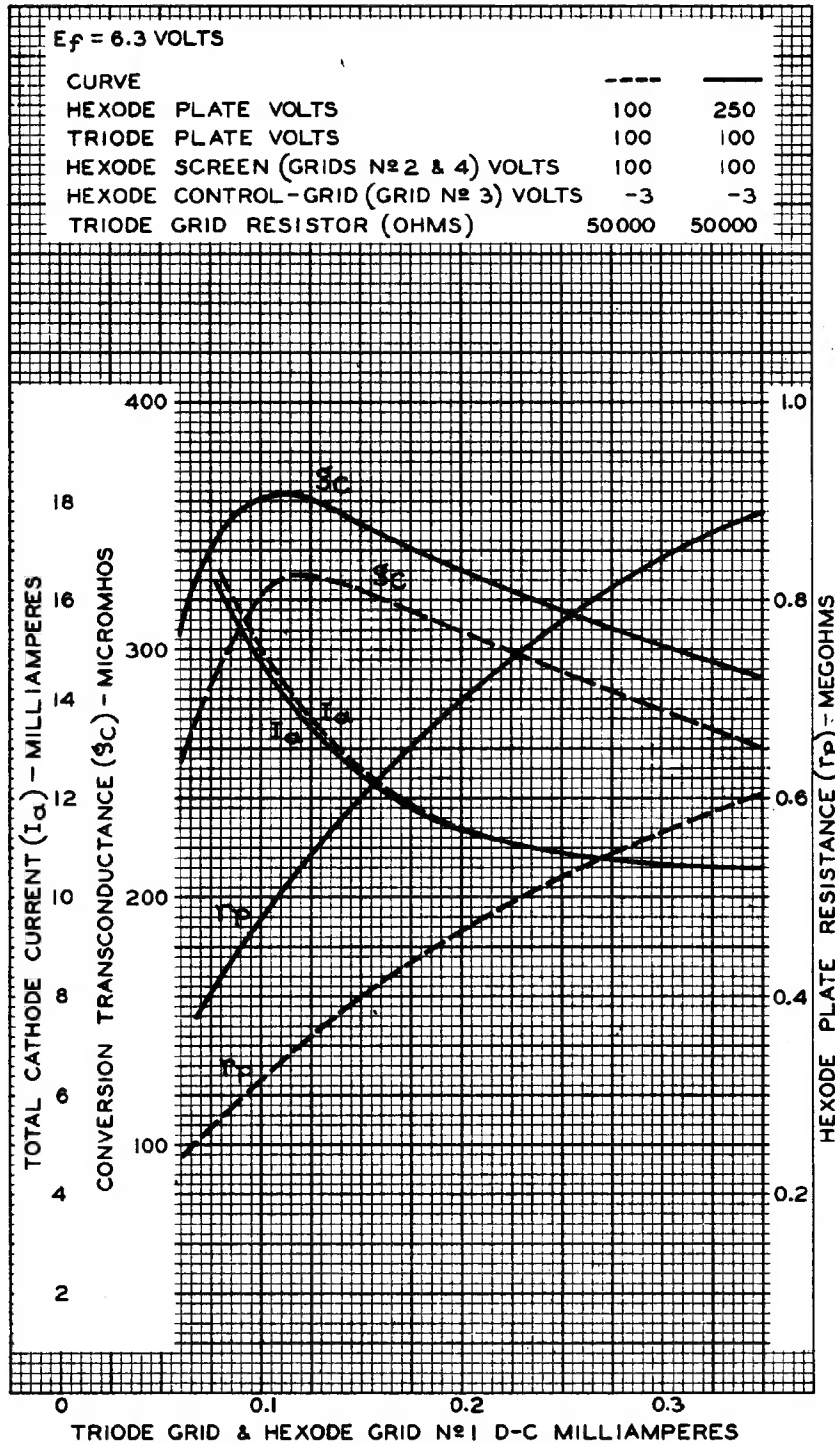
DATA

6K8



6K8

OPERATION CHARACTERISTICS



APRIL 8, 1938

RCA RADIODIODE DIVISION
RCA MANUFACTURING COMPANY, INC.

92C-4866RI